

CHAPTER 1

GENERAL

1-1. Purpose

This manual provides an elastic layered method for the thickness design of pavements for roads, streets, walks, and open storage areas at US Army and Air Force installations for the loadings and conditions set forth herein.

1-2. Scope.

The elastic layered procedure is used to determine thickness requirements of flexible and rigid pavement structures subject to vehicular traffic loads. This manual treats the thickness design of concrete pavements (both plain and reinforced), conventional flexible pavements, bituminous concrete pavements, and flexible pavements with stabilized layers. Other aspects of design, such as the preliminary investigation, mix design, material requirements, joints, overlays, reinforced concrete pavements, and the requirements for compaction and frost considerations are described in TM 5-822-5/AFM 88-7, Chap. 3.

1-3. References.

Appendix A contains a list of references used in this manual.

1-4. Computer Program.

A user-friendly road design computer program LEDROAD designed to be run on IBM or IBM-compatible personal computer has been prepared and is attached in APPENDIX D. Stresses and strains are calculated with the JULEA computer program within LEDROAD. Any questions concerning the program should be directed to:

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